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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,163	08/07/2001	Thane M. Larson	10012383-1	1476

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EXAMINER

HUYNH, KIM T

ART UNIT PAPER NUMBER

2111

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/924,163	Applicant(s) LARSON ET AL.	
	Examiner Kim T. Huynh	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-10, 12-16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong (US Patent 6,528,904) in view of Thornton (Pub. No US 20040225794)

As for claims 1, 8, Wong teaches a server system comprising:

a plurality of printed circuit assemblies including a plurality of host processor cards (see figure 1, plurality of CPU blades 15 which are processor cards); a management card coupled to the plurality of printed circuit assemblies (see figure 1, SERVER MGNT BLADE 10, 12 and each blade 10, 12 is coupling to the CPU blades 15 via buses), the management card dedicated to monitoring and managing operation of the server system (see figure 1, SERVER MGNT BODE 10, 12 and column 5 lines 19-42, wherein one MB handles the housekeeping chores such as health of the server and the other one acts as hot spare), including monitoring and managing on-line insertion and removing of the printed circuit assemblies (see figure 1, bus 27 and column 4 lines 63 to column 5 line 10 and column 2 lines 5-10, wherein the bus 27 providing hot swapping signal to the MBS 10, 12 when CPU blades 15 are hot swapping; and

Wong discloses all the limitations as above except wherein the management card includes a LAN switch configured to coupled to the plurality of host processor cards and an external management network. However, Thornton discloses a LAN interface switching unit which is configurable to route encoded signals from one or more of a plurality of computer cards to one or more LAN devices(external) to the removable function module. (paragraph 24-29)

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate Thornton's teaching into Wong's system so as to provide improved systems that are desired for adding modular functionality to co-located computer system. (paragraph 14-15)

As for claim 14, Wong teaches a server system comprising: a plurality of printed circuit assemblies including a plurality of host processor cards (see figure 1, plurality of CPU blades 15 which are processor cards; a management card coupled to the plurality of printed circuit assemblies (see figure 1, SERVER MGNT BLADE 10, 12 and each blade 10, 12 is coupling to the CPU blades 15 via buses), the management card dedicated to monitoring and managing operation of the server system (see figure 1, SERVER MGNT BODE 10, 12 and column 5 lines 19-42, wherein one MB handles the housekeeping chores such as health of the server and the other one acts as hot spare), including monitoring and managing on-line insertion and removing of the printed circuit assemblies (see figure 1, bus 27 and column 4 lines 63 to column 5 line 10 and column 2

lines 5-10, wherein the bus 27 providing hot swapping signal to the MBS 10, 12 when CPU blades 15 are hot swapping; and

Wong discloses all the limitations as above except a multiple-port LAN switch having at least four ports, the LAN switch coupled to the controller and configured to be coupled to a management connection of at least one of the plurality of removable cards. However, Thornton discloses a LAN interface switching unit which is configurable to route encoded signals from one or more of the plurality of computer cards to one or more LAN devices to the removable function module. (paragraph 24-29)

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate Thornton's teaching into Wong's system so as to provide improved systems that are desired for adding modular functionality to co-located computer system. (paragraph 14-15)

As for claims 2, 9, 15 and 20, Wong teaches the management card includes a management processor and a GN switch (see figure 1 MUX 22, the LAN switch coupled to management connections of the at least one host processor card, and management connections of the management processor (see figure 1, MUX 22, CPU blades 15, microcontroller 20).

As for claim 3, Wong teaches a backplane for connecting the plurality of printed circuit assemblies to the management card (see figure 2, backplane, CPU blades 15).

As for claims 6-7, 12-13 and 18-19, Wong teaches providing status information on the management card (see figure 1, SERVER MGNT BLADE 10, 12 and column 5 lines 18-42).

As for claims 4, 10 and 16, Wong teaches I2C bus (see column 2 lines 25-26).

3. Claims 5, 11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong (US Patent 6,528,904) in view of Thornton (Pub. No US 20040225794) and further in view of Bassman (US Patent 6,295,567)

Wong teaches cooling fans (col.2, lines 47-48).

The modified of Wong discloses all the limitations as above but does not expressly teach temperature sensor and controlling the fan speed. However, Bassman teaches such features cooling fan, temperature sensor and controlling fan speed (see column 8 lines 35-61). It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Bassman into the teachings of Wong because Bassman providing system detection from overheating, thereby preventing parts damage from overheating.

Response to Amendment

4. Applicant's amendment filed on 8/29/06 have been fully considered but does not place the application in condition for allowance.

a. In response to applicant's argument that neither Wong nor Thornton teach or suggest a server management card that includes a LAN switch configured to be coupled to the plurality of host processor cards and an external management network. Examiner respectfully disagrees. As Thornton notes at paragraphs 17-29 & figure 5(further cited for clarification), discloses the function module include interfacing cable connectors corresponding to each computer card slot. The cable connectors operable to couple to one cable for communicating with external systems(ie external management network". Furthermore, Thornton discloses the function module includes at least one data switch which is operable to perform data switching functions for the plurality of computer cards and a router which is operable to perform network routing function for the plurality of computer cards to external system. This is equivalent to applicant's claimed languages as "a Lan switch configured to be coupled to the plurality of host processor cards and an external management network". Thus, the prior art teaches the invention as claimed and the claims do not distinguish over the prior art as applied.

b. Applicant argues that Thornton does not expressly teach temperature sensor and controlling fan speed. Bassman discloses an embedded controller 605 that controls the speed of each fan. However, Bassman includes no teaching or suggestion that the embedded controller 605 or any portion thereof could or should be incorporated into a management cards. Examiner respectfully disagrees. As Bassman notes at (col.8, lines 38-62, further cited for clarification, discloses the embedded controller monitors and controls temperature (fan speed) within the computer system via program stored in a memory. The embedded controller coupled to the system processor for

generating interrupt to system processor in the even of a condition requiring the shut down of components of the computer system. This controller is incorporated into a management of system for controlling the system. It is clear that Bassman is an analogous art and it reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (571)272-3635 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 9:00AM- 6:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached at (571)272-3676 or via e-mail addressed to [rehana.perveen@uspto.gov].*

The fax phone numbers for the organization where this application or proceeding is assigned are (571)273-8300 for regular communications and After Final communications. Any inquiry of a general

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nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

Kim Huynh

November 3, 2006



MARK H. FINCHART
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100